PREDICTING MENTAL HEALTH

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REFLECTION:

In this study, we utilized behavioral and demographic information to forecast the mental health outcomes by linear regression. We must reflect on that linear regression is a method that is relatively simple and useful; however, the interpretation of nonlinear links in complex datasets like mental health may or may not be included is stated in the procedure article. For instance, research by James et al. (2013), linear models are found favored Ly due to their advantage of ease; nevertheless, the correct data needs to be for them to be truly effective. Vice versa, we had data pre-processing problems, which Bishop (2006) confirmed to be essential to data accuracy.

The findings of our study affirm Patel et al. (2017)'s claim regarding the importance of choosing appropriate variables for health-related predictions, and although the model represents 37.9% of the variation in mental health outcomes, it can be still enhanced. Additionally, as Dwork and Mulligan (2013) have pointed to, ethical issues related to data privacy and potential biases are still the main obstacles in the face of healthcare disparities. To maximize the accuracy of the predictions made, researchers will explore more and more complex models including random forests.

REFERENCES:

Bishop, C. M. (2006). *Pattern Recognition and Machine Learning*. Springer.

Dwork, C., & Mulligan, D. K. (2013). It's Not Privacy, and It's Not Fair. *Stanford Law Review Online*, 66(35), 35-40.

James, G., Witten, D., Hastie, T., & Tibshirani, R. (2013). *An Introduction to Statistical Learning: with Applications in R.* Springer.

Patel, V., Saxena, S., Lund, C., Thornicroft, G., Baingana, F., Bolton, P., ... & UnÜtzer, J. (2017). The Lancet Commission on global mental health and sustainable development. *The Lancet*, 392(10157), 1553-1598.